## A New Species of Posoqueria (Rubiaceae) from Bahia, Brazil

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ABSTRACT. Posoqueria bahiensis from southern Bahia, Brazil, is described as a new species. It differs most notably from all the other species of the genus in being totally glabrous except at the corolla fauce and anthers and in the densely multiflowered inflorescence with ca. 40 flowers.

Key words: Brazil, Posoqueria, Rubiaceae.

During the revision of the genus *Posoqueria* Aublet, it was evident that specimens from southern Bahia, Brazil, represent a new species. *Posoqueria bahiensis* is herein described and illustrated.

Posoqueria is a Neotropical genus belonging to the subfamily Ixoroideae, tribe Gardenieae, subtribe Gardeniinae (Robbrecht, 1988, 1993). The Brazilian species were mainly treated by Schumann (1889). The whole genus was treated by Macias (1988), who recognized 14 species.

Posoqueria bahiensis L. Macias & L. S. Kinoshita, sp. nov. TYPE: Brazil. Bahia: Maraú, restinga, 6 Oct. 1965 (fl), R. P. Belém 1877 (holotype, UB; isotypes, CEPEC, IAN, NY, VEN). Figure 1.

Posoqueriae latifoliae (Rudge) Roemer & Schultes foliorum textura tantum similis sed planta omnis glabra (fauce et antheris pilosis), inflorescentiis densis ca. 40 floribus differt.

Treelet up to 5 m high, entirely glabrous. Leaf blades  $13.8–32 \times 6.8–23$  cm, ovate, oblong to elliptic, acute or acuminate at apex, entire or rarely slightly undulate and slightly revolute at margin, rounded at base, strongly coriaceous, dark green and shining above, paler and slightly opaque beneath, secondary nerves in 5 to 8 pairs, alternate or subopposite; petioles 1.5–3 cm long; stipules interpetiolar,  $0.8–1.5 \times 0.5–0.8$  cm, deltoid, acute at apex. Inflorescence almost spherical, ca. 30 cm diam.; 3-times branched corymbiform cymes, peduncle 6–8 cm long; bracts linear, 5–8 mm long.

Flowers ca. 40, very fragrant, pedicels 0.6–1.3 cm long; bracteoles linear, ca. 2 mm long. Hypanthium ca. 2 mm long, obovoid, glabrous; calyx limb-tube ca. 2 mm long with a few colleters inside at the base; calyx lobes triangular, ca. 1 mm long, ciliate; corolla hypocrateriform, 9-14 cm long, tube pale green, 6-12 cm long, 1-2 mm wide at base, internal proximal region minutely papillate, distal region with conspicuous sparsely distributed round papillae; fauce glabrous to sparsely villous; lobes white,  $1.5-1.8 \times 0.3-0.5$  cm, oblong, rounded at apex. Filaments 1.8–2 mm long; anthers ca. 0.5 cm long, linear-lanceolate, sparsely puberulous. Hypanthium glabrous; style 4-4.9 cm long, stigma ca. 2 mm long. Fruits ovoid, coriaceous, 3.5-5.2 × 2.8-3.8 cm, apricot colored (in vivo), seeds blackish, ca.  $1.1 \times 0.7$  cm.

Distribution. In southern Bahia, Brazil, in disturbed rain forest.

Phenology. Flowering in October; fruit collected in January to September.

Posoqueria bahiensis differs from other species of the genus in the glabrescent corolla fauce and anthers, the densely flowered inflorescence (ca. 40 flowers), and the strongly coriaceous leaves. Table 1 shows a character comparison among four species of Posoqueria morphologically related to P. bahiensis. Posoqueria bahiensis is similar to P. latifolia (Rudge) Roemer & Schultes in the texture of the leaves, but differs by the dense inflorescence with ca. 40 flowers. It is also similar to P. williamsii Stevermark, but differs in leaf indumentum and texture and number of flowers. The new species also resembles P. maxima Standley, but this has lax inflorescences with only 10 to 20 flowers. Posoqueria bahiensis is known only from southern Bahia, Brazil.

Paratypes. BRAZIL. Bahia: Parque Nacional de Monte Pascoal, on NW side of Monte Pascoal at low al-

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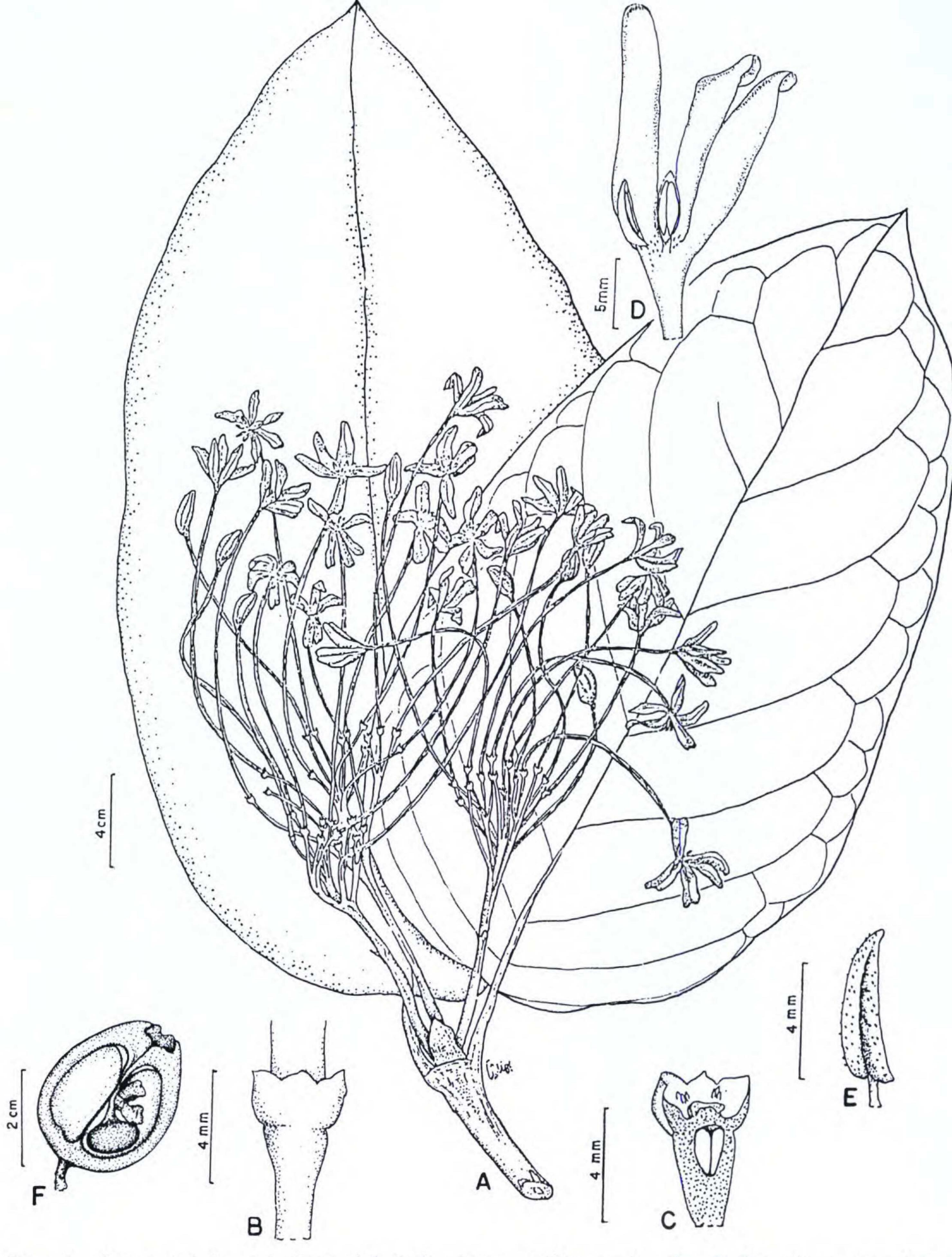


Figure 1. Posoqueria bahiensis L. Macias & L. S. Kinoshita. —A. Flowering branch. —B. Hypanthium, external view. —C. Ovary, longitudinal section showing the colleters alternating with the lobes. —D. Corolla fauce and anthers. — E. Stamen, sparsely puberulous anthers. —F. Longitudinal section of the fruit. (A–E from Belém 1877, UB; F from Harley et al. 17898, CEPEC.)

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Table 1. Comparison of some morphological characters among five Posoqueria species.

| Species       | Leaf size (cm)           | Leaf shape                                      | hape Leaf indumentum Leaf texture Inflorescen | Leaf texture                   | Inflorescence | Flower | Distribution                 |
|---------------|--------------------------|---|---|--------------------------------|---------------|--------|------------------------------|
| P. acutifolia | $5.5-8.5 \times 1.4-4.7$ | Elliptical, lanceolate<br>to oblong-lanceolate  | Glabrous                                      | -qn                            | Lax           | 10-20  | Brazil: Minas<br>Gerais, Rio |
| P. bahiensis  | $13.8-32 \times 6.8-23$  | Ovate, oblong to ellip-                         | Glabrous                                      | Strongly coriaceous            | Dense         | Ca. 40 | São Paulo<br>Brazil: Bahia   |
| P. latifolia  | $10-30 \times 5-15$      | Elliptical, ovate-lance-<br>olate to wide ovate | Glabrous to puberulous on                     | Chartaceous to coria-<br>ceous | Sublax        | 6-30   | Southern Mexico              |
| P. maxima     | $25-30 \times 16-24$     | Ovate, widely ovate to                          | abaxial side<br>Glabrous                      | Chartaceous to subco-          | Lax           | 10-20  | Colombia, Ecua-              |
| P. williamsii | $25-39.5 \times 13.5-17$ | Lanceolate-ovate to elliptical-ovate            | Glabrous adaxi-<br>ally, villous              | Subcoriaceous                  | Dense         | 20-30  | Costa Rica, Panama, Ve-      |
|               |                          |   | abaxially                                     |                                |               |        | nezuela                      |

titude, between IBDF field hut and gates of the Parque Nacional, 39°25′W, 16°53′S, 12 Jan. 1977 (fr), *R. M. Harley et al. 17898* (CEPEC); Uruçuca, District of Serra Grande, 7.3 km along road Serra Grande/Itacaré, Fazenda Lagoa do Conjunto Fazenda Santa Cruz, 39°01′W, 14°25′S, 4 Fev. 1991 (fr), *J. C. Jardim et al.* 607 (CEPEC, MO), 11–21 Set. 1991, (fr), *A. M. Carvalho et al.* 3521 (CEPEC), 26 Oct. 1993 (fl), *W. W. Thomas et al.* 10166 (CEPEC).

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## Literature Cited

Macias, L. 1988. Revisão Taxonômica do Gênero *Poso-queria* Aubl. (Rubiaceae). Tese de Mestrado, Instituto de Biologia, Universidade de Campinas, Campinas. [Unpublished.]

Robbrecht, E. 1988. Tropical woody Rubiaceae. Characteristic features and progressions. Contributions to a new subfamilial classification. Opera Bot. Belg. 1: 1–271.

Schumann, K. 1889. Rubiaceae. Pp. 329–340 in C. F. P. von Martius, A. G. Eichler & I. Urban (editors), Flora Brasiliensis. V. 6. Fleischer, Leipzig.